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**REMARKS**

Claims 1-27, all the claims pending in the application, stand rejected on prior art grounds. More specifically, claims 1 and 20 stand rejected under 35 U.S.C. §102(b) as being anticipated by Clarke (U.S. Patent No. 5,708,967). Claims 2, 5 and 7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Clarke, in view of Edelstein (U.S. Patent No. 5,263,027). Claims 3, 6 and 21-27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Clarke, in view of Johnson (U.S. Patent No. 5,640,422). Claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Clarke, in view of Edelstein and in further view of Dunning, et al. (U.S. Patent No. 6,606,360), hereinafter referred to as Dunning. Claims 8, 9, 13-15 and 19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Clarke, in view of Edelstein, et al. (U.S. Publication No. 2003/0101170), hereinafter referred to as Edelstein. Claims 10-12 and 16-18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Clarke, in view of Edelstein, and in further view of Dunning. Applicants respectfully traverse these rejections based on the following discussion.

**A. The Rejection Based on Clarke**

The Office Action proposes that Clarke teaches an integrated circuit that has a segmented data line. However, Applicants respectfully submit that Clarke actually teaches a grid system for broadcasting wireless transmissions which reduces interference between adjacent transmitters and does not teach an integrated circuit chip or a segmented data line.

In Figures 1 and 2, Clarke discloses a grid of wireless transmitters that have the capability to broadcast the same signal directionally utilizing horn antennae (SPA1, SPA2). The antenna shown in Figure 2 appears at location S1 in Figure 1 and broadcasts signal A in diagonally opposite directions (column 2, line 66-column 3, line 4). One of the advantages of the system presented in Clarke is that, in the grid shown in Figure 1, the frequencies (A, B, C, D) at which the different antennas broadcast the same data signal is alternated from antenna to antenna such

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that each geographic location (represented by each square in a grid shown in Figure 1) will not have the same frequency signal overlapping from an adjacent broadcasting antenna (column 1, lines 24-34 and lines 39-43). Therefore, in Clarke each of the different antennae simultaneously broadcast the same data signal (using different frequencies) in diagonally opposite directions so that the signal can be received by a receiving antenna (ANT in Figure 2) without suffering from interference. Clarke does not disclose an integrated circuit chip and does not disclose a segmented data line, much less the ability to use different portions of the segmented data line to simultaneously transmit different data portions as is claimed.

Therefore, it is Applicant's position that Clarke cannot teach or suggest the claimed integrated circuit chip because the disclosure of Clarke is limited to an outdoor antenna or broadcasting system. Further, even if the teachings of Clarke could somehow be applied to integrated circuit chip technology (which Applicants submit is not plausible), since the horn antennas (SPA1, SPA2) broadcast the exact same signal (e.g., signal A) in diagonally opposite directions, there is no teaching of a segmented data line of much less that "data propagators are adapted to simultaneously propagate different data portions along segments of said segmented data line" defined by independent claim 1 or "propagating said first data portion along a second segment of said segmented data line and simultaneously propagating a second data portion along said first segment of said segmented data line" as defined by independent claim 20.

Thus, it is Applicant's position that Clarke does not teach any of the claimed features defined by independent claims 1 and 20 and that independent claims 1 and 20 are not anticipated by Clarke. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw this rejection.

**B. The Rejection Based on Clark in view of Sakaguchi**

As shown above, Clarke teaches a system for broadcasting wireless transmissions which reduces interference between adjacent transmitters and does not teach an integrated circuit chip or a segmented data line. Sakaguchi is referenced for the limited purpose of showing the

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collector, single data communication line, and operation of the data propagators that are defined by dependent claims 2, 5, and 7.

First, Applicants notes that Sakaguchi is not referenced for teaching the claimed segmented data line or the claimed ability to transmit different data portions simultaneously along the segmented data line and Sakaguchi does not teach these features. Thus, Sakaguchi does not cure the deficiencies of Clarke that are discussed above. Therefore, the proposed combination of Sakaguchi and Clarke does not teach the invention defined by independent claim 1.

Further, Applicants notes that the teachings of Sakaguchi relate to utilizing a single transmission line to multiplex signals along the transmission line. Therefore, Sakaguchi is essentially unrelated to the wireless signal broadcasting grid discussion presented in Clarke and two are not properly combinable. Further, Sakaguchi is unrelated to the claimed invention because Sakaguchi does not include any form of segmented data line that would allow the claimed ability to transmit different data portions along the different segments of the segmented data line.

Thus, it is Applicant's position that it is improper to combine Clarke and Sakaguchi and further that the proposed combination does not teach or suggest the invention defined by independent claim 1. Further, the proposed combination does not teach that the segmented data line comprises a single transmission line (claim 5) or any device that would collect the different segments that were transmitted along the segmented data line (claim 2), much less any form of communication between the propagators along the segmented data line (claim 7). Therefore, dependent claims 2, 5, and 7 are patentable not only because they depend from patentable independent claim 1, but also because of the additional features of the invention they define. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw this rejection.

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**C. The Rejection Based on Clark in view of Johnson**

As shown above, Clarke teaches a system for broadcasting wireless transmissions which reduces interference between adjacent transmitters and does not teach an integrated circuit chip or a segmented data line. Johnson is referenced for the limited purpose of showing the claimed ability to break the signal data transmission into different data portions, the data communication network, the ability to reassemble the different data portions, and the data propagators that are defined by claims 3, 6, and 21-27.

First, Applicants notes that Johnson is not referenced for teaching the claimed segmented data line or the claimed ability to transmit different data portions simultaneously along the segmented data line and Johnson does not teach these features. Thus, Johnson does not cure the deficiencies of Clarke that are discussed above. Therefore, the proposed combination of Johnson and Clarke does not teach the invention defined by independent claims 1, 20 or 25.

Further, Applicants notes that the teachings of Johnson relate to the ability to assign unique time slots for different signals utilizing a synchronization pulse transmitter (column 3, lines 12-35). Therefore, Johnson is essentially unrelated to the wireless signal broadcasting grid discussion presented in Clarke and two are not properly combinable. Further, Johnson is unrelated to the claimed invention because Johnson does not include any form of segmented data line that would allow the claimed ability to transmit different data portions along with different segments of the segmented data line. To the contrary, Johnson requires that the entire signal line be uniquely dedicated to one signal according to the unique time slot assigned to that signal.

Thus, it is Applicant's position that it is improper to combine Clarke and Johnson and further that the proposed combination does not teach or suggest the invention defined by independent claims 1, 20 or 25. Further, the proposed combination does not teach the ability to break up a data signal into different segments and then transmit these segmented simultaneously along different portions of the segmented data line (or potentially to multiple recipients) as defined by dependent claims 3, 6, 21-24, and 26-27. Therefore, independent claims 1, 20, and 25 are patentable over the prior art of record and dependent claims 3, 6, 21-24, and 26-27 are

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patentable not only because they depend from a patentable independent claim, but also because of the additional features of the invention they define. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw this rejection.

**D. The Rejection Based on Clark in view of Sakaguchi and Dunning**

As shown above, Clarke teaches a grid system for broadcasting wireless transmissions which reduces interference between adjacent transmitters and does not teach an integrated circuit chip or a segmented data line and Sakaguchi is not referenced for teaching the claimed segmented data line or the claimed ability to transmit different data portions simultaneously along the segmented data line and Sakaguchi does not teach these features. Dunning is referenced for the limited purpose of disclosing that the data portions can be self-timed as defined by dependent claim 4.

Applicants first note that neither Clarke, Sakaguchi, nor Dunning teach or suggest the segmented data line as defined by independent claim 1 and that Sakaguchi and Dunning are not referenced for teaching the features defined by independent claim 1. Further, it is Applicants position that Dunning relates to asynchronous data transmission and to the ability to more readily identify edges of clock phases and is therefore completely unrelated to the antenna broadcasting grid disclosed in Clarke and is also completely unrelated to the concept of simultaneously transmitting different data segments along a segmented data line as in the claimed invention. Therefore, Applicants submit that one ordinarily skilled in the art would not have combined Dunning and Clarke. Further, Dunning provides no discussion that would teach one ordinarily skilled in the art that different data segments being transmitted along a segmented data line should be self-timed. Instead, Dunning concentrates on properly identifying edges of clock signals and improvements therefore.

Thus, Applicants submit that the proposed combination of references does not teach or suggest the invention defined by independent claim 1 and that independent claim 1 is patentable over the proposed combination of references. Further, dependent claim 4 is similarly not taught

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by the prior art of record and, therefore, dependent claim 4 is patentable because of the additional features it defines and because it depends from patentable independent claim 1. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw this rejection.

**E. The Rejection Based on Clark in view Edelstein**

As shown above, Clarke teaches a system for broadcasting wireless transmissions which reduces interference between adjacent transmitters and does not teach an integrated circuit chip or a segmented data line. Edelstein is referenced for the limited purpose of showing the data transmitter, propagator, receiver, etc. that are defined by independent claims 8 and 14, as well as the features defined by dependent claims 9, 13, 15, and 19.

First, Applicants notes that Edelstein is not referenced for teaching the claimed segmented data line or the claimed ability to transmit different data portions simultaneously along the segmented data line and Edelstein does not teach these features. Thus, Edelstein does not cure the deficiencies of Clarke that are discussed above. Therefore, the proposed combination of Edelstein and Clarke does not teach the invention defined by independent claims 8 and 14.

Further, Applicants notes that the teachings of Edelstein relate to a more efficient way to provide queries to databases (paragraphs 18 and 48) and are completely unrelated to signal transmission or processing, much less to the antenna grid disclosed in Clarke or the segmented data line of the claimed invention. Therefore, Edelstein is not properly combinable with Clarke. Further, Edelstein is unrelated to the claimed invention because Edelstein does not include any form of segmented data line that would allow the claimed ability to transmit different data portions along with different segments of the segmented data line.

Thus, it is Applicant's position that it is improper to combine Clarke and Edelstein and further that the proposed combination does not teach or suggest the invention defined by independent claims 8 and 14. Further, the proposed combination does not teach any device or method involving the use of segmented data lines to simultaneously transmit different segments

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of data as claimed. Thus, independent claims 8 and 14 are patentable over the proposed combination of references. Further, dependent claims 9, 13, 15, and 19 are similarly patentable, not only by virtue of their dependency from a patentable independent claim, but also by virtue of the additional features of the invention they define. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw this rejection.

**F. The Rejection Based on Clark in view Edelstein and Dunning**

As shown above, Clarke teaches a system for broadcasting wireless transmissions which reduces interference between adjacent transmitters and does not teach an integrated circuit chip or a segmented data line and Edelstein is not referenced for teaching the claimed segmented data line or the claimed ability to transmit different data portions simultaneously along the segmented data line and Edelstein does not teach these features. Dunning is referenced for disclosing that the data portions can be self-timed.

Applicants first notes that neither Clarke, Edelstein, nor Dunning teach or suggest the segmented data line as defined by independent claims 8 and 14 and that Edelstein and Dunning are not referenced for teaching this feature. Further, it is Applicants position that Dunning relates to asynchronous data transmission and to the ability to more readily identify edges of clock phases and is therefore completely unrelated to the antenna broadcasting grid disclosed in Clarke and is also completely unrelated to the concept of simultaneously transmitting different data segments along a segmented data line as in the claimed invention. Therefore, Applicants submit that one ordinarily skilled in the art would not have combine Dunning and Clarke. Further, Dunning provides no discussion that would teach one ordinarily skilled in the art that different data segments being transmitted along a segmented data line should be self-timed. Instead, Dunning concentrates on properly identifying edges of clock signals and improvements therefore.

Thus, Applicants submit that the proposed combination of references does not teach or suggest the invention defined by independent claims 8 and 14 and that independent claims 8 and 14 are patentable over the proposed combination of references. Further, dependent claims 10,

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11, 12, 16, 17, and 18 are similarly not taught by the prior art of record and, therefore, are patentable because of the additional features they define and because they depend from patentable independent claim 1. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw this rejection.

## II. Formal Matters and Conclusion

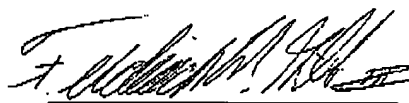
In view of the foregoing, Applicants submit that claims 1-27, all the claims presently pending in the application, are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary.

Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 09-0456.

Respectfully submitted,

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Frederick W. Gibb, III, Esq.  
Registration No. 37,629

McGinn & Gibb, PLLC  
2568-A Riva Road, Suite 304  
Annapolis, MD 21401  
(410) 573-1545  
Customer Number: 29154